

32692

Customer Number



Patent  
Case No.: 56200US041

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

First Named Inventor: HEPPNER, PHILIP D.

Application No.: 10/696108

Group Art Unit: 1625

Filed: October 29, 2003

Examiner: Huang, Evelyn Mei

Title: ARYL ETHER SUBSTITUTED IMIDAZOQUINOLINES

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

06 January 2004 Renee A. Wolff  
Date Signed by: Renee A. Wolff

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. Copies of any cited foreign patents, non-patent literature, and unpublished US application documents are enclosed. Pursuant to the waiver in the Pre-OG Notice, dated July 11, 2003, copies of US patents and published US patent applications are no longer required and are not enclosed. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

Applicants also wish to bring to the Examiner's attention the Parent applications 10/165,750 (allowed) and 10/013,202 (Patent No. 6,670,372), and the Office Actions therefore.

It is believed that no fee is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

Respectfully submitted,

6 January 2004  
Date

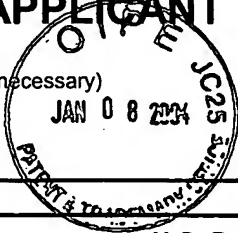
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Office of Intellectual Property Counsel  
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Facsimile No.: 651-736-3833

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/696,108
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First Named Inventor	Philip D. Heppner
Art Unit	Unknown
Examiner Name	Unknown
Attorney Case Number	56200US041

## U.S. Patent Documents

Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A1	US- 3,314,941	04-18-1967	Littell et al.	
	A2	US- 4,689,338	08-25-1987	John F. Gerster	
	A3	US- 4,698,348	10-06-1987	John F. Gerster	
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	A28	US- 6,331,539	12-18-2001	Crooks et al.	

\*Examiner:

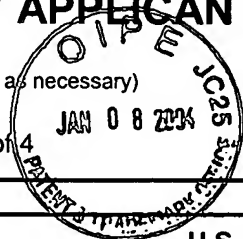
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	A29	US- 6,376,669	04-23-2002	Rice et al.	
	A30	US- 2002/0055517 A1	05-09-2002	Smith	
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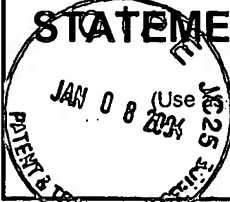
## Foreign Patent Documents

Exam. Init.*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry. Code	Number-KindCode (If known)				
	B1	PCT	WO 01/74343	10-11-2001			
	B2	PCT	WO 02/36592	05-10-2002			X
	B3	PCT	WO 02/46188	06-13-2002			
	B4	PCT	WO 02/46189	06-13-2002			
	B5	PCT	WO 02/46190	06-13-2002			
	B6	PCT	WO 02/46193	06-13-2002			
	B7	PCT	WO 02/46749	06-13-2002			
	B8	PCT	WO 02/102377	12-27-2002			
	B9	PCT	WO 03/020889	03-13-2003			

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Substitute Form 1449A/PTO (modified)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>   (Use as many sheets as necessary)  Page 3 of 4	Application Number	10/696,108
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		Ctry. Code	Number-KindCode (If known)				
	B10	PCT	WO 03/043572	05-30-2003			
	B11	PCT	WO 03/045391	06-05-2003			
	B12	JP	9-208584	08-12-1997			
	B13	JP	9-255926	03-26-1999			X
	B14	JP	11-222432	08-17-1999			X
	B15	JP	2000-247884 (abs)	09-12-2000			X
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	B17	EP	1 104 764	06-06-2001			

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	Wozniak, et al., "The Amination of 3-nitro-1, 5-naphthyridines by Liquid Ammonia/Potassium Permanganate <sup>1,2</sup> . A New and Convenient Amination Method.", <u>Journal of the Royal Netherlands Chemical Society</u> , 102, pp 511-513, December 12, 1983.
	C2	Brennan, et al., "Automated Bioassay of Interferons in Micro-test Plates", <u>Biotechniques</u> , June/July, 78, 1983.
	C3	Testerman, et al., "Cytokine Induction by the Immunomodulators Imiquimod and S-27609", <u>Journal of Leukocyte Biology</u> , Volume 58, pp. 365-372, September 1995.
	C4	Bachman, et al., "Synthesis of Substituted Quinolylamines. Derivatives of 4-Amino-7-Chloroquinoline", <u>J. Org. Chem.</u> , 15, pp 1278-1284 (1950).
	C5	Jain, et al., "Chemical and Pharmacological Investigations of Some $\omega$ -Substituted Alkylamino-3-aminopyridines", <u>J. Med. Chem.</u> , 11, pp 87-92 (1968).
	C6	Baranov, et al., <u>Chem. Abs.</u> 85, 94362, (1976).
	C7	Berényi, et al., "Ring Transformation of Condensed Dihydro-as-triazines", <u>J. Heterocyclic Chem.</u> , 18, pp 1537-1540 (1981).
	C8	Chollet, et al., "Development of a Topically Active Imiquimod Formulation", <u>Pharmaceutical Development and Technology</u> , 4(1), pp 35-43 (1999)
	C9	Izumi, et al., "1H-Imidazo[4,5-c]quinoline Derivatives as Novel Potent TNF- $\alpha$ Suppressors: Synthesis and Structure-Activity Relationship of 1-, 2- and 4-Substituted 1H-imidazo[4,5-c]pyridines", <u>Bioorganic &amp; Medicinal Chemistry</u> , 11, pp 2541-2550 (2003)
	C10	Sidky et al., "Inhibition of Murine Tumor Growth by an Interferon-inducing Imidazoquinolinamine", <u>Cancer Research</u> , 52, 3528-3533, July 1, 1992.

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## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C11	R.L. Miller et al., "Imiquimod applied topically: a novel immune response modifier and new class of drug", <u>International Journal of Immunopharmacology</u> , 21, 1-14 (1999).
	C12	Karl R. Beutner, MD, et al., "Therapeutic response of basal cell carcinoma to the immune response modifier imiquimod 5% cream", <u>J.Am.Acad.Dermatol.</u> , Volume 41, Number 6, 1002-1007 (December 1999).
	C13	Davis et al., "Self-Administered Topical Imiquimod Treatment of Vulvar Intraepithelial Neoplasia", <u>Journal of Reproductive Medicine</u> , Volume 45, Number 8, 619-623, (August 2000).
	C14	Alexander Steinmann et al., "Topical Imiquimod Treatment of a Cutaneous Melanoma Metastasis", <u>J.Am.Acad.Dermatol.</u> , Letters, 555-556 (September 2000).

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